

B.Sc. (Hons.) in Information Technology Year 1 - Semester 2, 2017

Lab Exercise 5 (Descriptive Statistics)

IT1070 - Probability & Statistics

Week 04

The numbers of shareholders for a selected of large companies (in thousands) are given below.

| Company | Number of Shareholders (thousands) |
|-------------------------------|------------------------------------|
| Pan American World Airways | 144 |
| General Public Utilities | 266 |
| Occidental Petroleum | 177 |
| Middle South Utilities | 133 |
| DaimlerChrysler | 209 |
| Standard Oil of California | 264 |
| Bethlehem Steel | 160 |
| Long Island Lighting | 143 |
| RCA | 246 |
| Greyhound Corporation | 151 |
| Pacific Gas & Electric | 239 |
| Niagara Mohawk Power | 204 |
| E.I. du Pont de Nemours | 204 |
| Westinghouse Electric | 195 |
| Union Carbide | 176 |
| BankAmerica | 175 |
| Northwest Utilities | 200 |
| Standard Oil (India) | 173 |
| Atlantic Richfield | 195 |
| Detroit Edition | 220 |
| Eastman Kodak | 251 |
| Dow Chemical | 137 |
| Pennsylvania Power | 150 |
| American Electric Power | 262 |
| Ohio Edition | 158 |
| Transamerica Corporation | 162 |
| Colombia Gas System | 165 |
| International Telephone | 223 |
| Union Electric | 158 |
| Virginia Electric and Power | 162 |
| Public Service Electric & Gas | 225 |
| Consumer Power | 161 |

The number of shareholders is to be organized into a frequency distribution.

- 1. Draw a histogram for the above data.
- 2. Draw a histogram using seven classes where the lower limit is 130 and an upper limit of 270.
- 3. Construct the frequency distribution for the above specification.
- 4. Portray the distribution in the form of a frequency polygon.
- 5. Portray the distribution in a less-than cumulative frequency polygon.
- 6. Based on the polygon, three out of four (75%) of the companies have how many shareholders or less?